

ABSTRACT OF THE DISCLOSURE

An engine startup fuel control system for use with a four-cycle internal combustion engine of the type having a plurality of combustion chambers, an air intake passageway, a source of fuel, a crankshaft and a camshaft which operates the engine cylinder valves. A multipoint fuel injector is associated with each combustion chamber and each multipoint fuel injector has an inlet connected to the fuel source and an outlet connected to the air intake passageway adjacent its associated combustion chamber. A crankshaft position sensor generates an output signal representative of the angular position of the crankshaft while, similarly, a camshaft position sensor generates an output signal representative of the angular position of the camshaft. An engine control unit is programmed to determine the synchronization of the engine in response to the output signals from the crankshaft position sensor and camshaft position sensor. The engine control unit has outputs which control the activation of each multipoint fuel injector and is programmed to vary the activation of the multipoint fuel injector after determination of the engine synchronization in order to achieve a predetermined air/fuel mixture in each combustion chamber during engine startup.